

SPENDING IN AND FOR SCOTLAND: EXPLORATORY ANALYSIS

Summary

This note presents the initial findings of exploratory analysis into the level of public spending that occurs in Scotland, as opposed to for Scotland. The latter is the measure used in GERS. For most expenditure, spending for or in Scotland is thought to be similar, but the differences have not previously been investigated. These are the first set of results from the analysis, and the intention is that they will continue to be developed over time. We welcome feedback from users on how the work can be improved. Feedback can be provided by emailing economicstatistics@gov.scot.

Understanding the level of spend by the public sector in Scotland, rather than spending which is undertaken to provide public services for Scotland, is required to assess the economic output associated with public spending, and potentially provides a different insight into Scottish public spending, as even when total spending in and for Scotland and similar, they may have a different composition.

The purpose of this analysis is to estimate the difference between the two measures of spending. There are a number of challenges in producing these figures, and in these initial exploratory results defence, international aid, and public sector debt interest have been excluded from the analysis. These account for around 10% of spending for Scotland, meaning around 90% of GERS expenditure is included in the analysis.

Spending in Scotland is built up by estimating, for each department:

- staff costs for employees in Scotland;
- office costs for buildings or sites in Scotland;
- grants and social security payments made to recipients in Scotland; and
- capital costs associated with specific programmes.

The analysis therefore does not include analysis of spend such as procurement, and **may therefore underestimate to a degree** the level of spending in Scotland. This is an area for future development, and should be borne in mind when interpreting these initial results.

The results are presented for 2019-20. This allows spending in and for Scotland to be compared, whilst largely excluding the effects of the coronavirus pandemic on government spending.

Overall, some broad conclusions can be drawn:

- For the range of Government departments considered so far, spending 'for' Scotland and spending 'in' Scotland are broadly similar.
- For the expenditure considered in this paper, in 2019-20 spending in Scotland is around 2% lower than the equivalent spending for Scotland. However, the estimates of spending in Scotland are thought to be an underestimate at this time;

- There are a small number of departments where spending ‘in’ Scotland is higher than spending ‘for’ Scotland but the difference is small;
- There are a number of departments where spending ‘in’ Scotland is lower than spending for Scotland but the difference is small; and
- There remain areas of spend where it is not possible to assign a geographic location of spend, including debt interest payments.

Within the departments analysed, spending in Scotland is estimated to be no more than around 2% lower than spending for Scotland. As shown in the table below, the largest single difference relates to the fact that GERS includes a contribution to spending that occurs outside the UK, such as UK pensions paid to people living outside the UK. This was £355 million for Scotland in 2019-20.

However, even excluding this element, there are a number of areas where spend in Scotland is estimated to be lower than spending for Scotland in GERS, such as spending associated with the:

- UK Security and Intelligence Agencies;
- Cabinet Office;
- UK Parliament; and
- Department for Business, Energy, and Industrial Strategy.

The table below summarises the initial findings and the sources of differences between spending in and for Scotland.

Spend in and for Scotland (2019-20, £ million)

	Spend in Scotland	Spend for Scotland	Difference
Overall spending	63,920	65,115	-1,195
<i>Of which</i>			
<i>Social security outside UK</i>	0	355	-355
<i>UK Security and Intelligence Agencies</i>	0	245	-245
<i>Dept. of Business, Energy, & Industrial Strategy</i>	832	954	-121
<i>Cabinet Office</i>	2	121	-119
<i>UK Parliament</i>	0	77	-77

These estimates are experimental statistics which are in an early stage of development. They have been published to engage users in their development, and As set out above, we welcome feedback on these statistics, which can be provided by emailing economicstatistics@gov.scot.

Background

The Government Expenditure & Revenue Scotland (GERS) publication shows public spending for Scotland. Whilst this approach is useful in understanding the total cost of public services that are provided for Scotland, there is increasing user interest in understanding how much public sector spend occurs in, as opposed to for Scotland. Understanding the geographical location of public spending is particularly helpful when trying to understand how much economic output is associated with public spending.

Since the estimates of per person spending for Scotland in GERS have historically been higher than spending in the rest of the UK, there is also interest from users in understanding whether this reflects a higher level of public spending in Scotland, or spending occurring outside of Scotland being apportioned to Scotland.

In general, there are a number of reasons why spending in Scotland may be higher than other parts of the UK. The public sector has a slightly different scope in Scotland, with services such as water and sewerage being provided by the public sector in Scotland whilst they are provided by the private sector in England and Wales. Scotland has also retained a higher degree of local authority housing than other parts of the UK, and has more rural and remote areas where it may cost more to deliver public services, although this factor is not considered in determining funding for Scotland.

However, primarily, higher spending for Scotland in GERS reflects the fact that that funding for devolved areas, as determined through the Barnett formula, is higher in Scotland than other parts of the UK.

This higher level of spending is reflected a greater number of people in Scotland being employed in the public sector. There are approximately 560,000 people employed in the public sector in Scotland, representing 10% of the total UK public sector workforce.

The conceptual difference between spending in and for

In GERS, public sector expenditure is estimated on the basis of spending incurred to provide services *for* residents of Scotland. That is, a particular public sector expenditure is apportioned to a region if the outcome of the expenditure is thought to provide a public service which benefits residents of that region.

This is a different measure from total public expenditure *in* Scotland. For most expenditure, spending *for* or *in* Scotland will be similar. For example, in general NHS Scotland expenditure occurs *in* Scotland and is *for* patients resident in Scotland.

There are, however, areas where expenditure *for* and *in* will differ. These will typically relate to areas where GERS allocates Scotland a population share of UK spending. This could be, for example, defence spending, or spending associated with administering reserved services, such as reserved social security.

Deriving estimates of spending in Scotland

In order to derive estimates of spending in Scotland, a ‘bottom up’ approach is used. As in GERS, spending is split into two broad categories, spending by Scottish bodies, such as the Scottish Government and local authorities, and spending by other UK government departments.

The calculations in this paper show results for 2019-20. This year is chosen as it provides a more representative year for spending in Scotland, before the full impacts of the pandemic were seen in 2020-21.

A number of spend types are excluded from this analysis and account for around 10% of spending for Scotland:¹

- Public sector debt interest;
- International aid;
- Defence spending.

In general, it is difficult to identify where this spend occurs. Some initial work has been undertaken on these areas, and this is set out in Annex B.

Spending by Scottish bodies

Spending by Scottish bodies includes spending by the Scottish Government, Scottish Local Authorities, and public corporations such as Scottish Water. Their spending is consistent with published accounts, as set out in GERS Table A.10. For the purposes of this analysis, all spending by these bodies is assumed to occur in Scotland. This is a simplifying assumption which can be refined in future work.

Since in GERS some Scottish Government spending is assumed to be undertaken for the rest of the UK (such as spending on museums), this means that spending in Scotland by these bodies is approximately £100 million higher than spending for Scotland.

Spending in and for Scotland, Scottish bodies (£ million, 2019-20)

	Spending in Scotland	Spending for Scotland	Difference
Scottish bodies	£42,003	£41,903	£100

Spending by other UK government bodies

Spending by other UK government bodies is broken down into three broad components.

1. Staff spending
2. Spend on buildings and associated costs
3. Spending with businesses and households

¹ Spending covers only expenditure on services. This means that accounting adjustments, which are typically non-cash items included in both revenue and expenditure are excluded.

Staff spending

Based on the latest public sector employment statistics, there were around 45,000 staff working in the reserved public sector in 2019-20.

The paybill for these staff is calculated using a mixture of administrative data. Paybill information at department level is available from Civil Service Statistics. This shows reserved civil servants earn an average of £27,500. This is uplifted by 25% to include employer social security costs and public section pension costs, which represent £6,870 on a salary of £27,500. This is based on the employer social security costs and public sector pension costs as published in Scottish Government Consolidated Accounts.²

Currently, it is assumed that all reserved employees have the same average salary as civil servants in their sponsor department, although this is an area for further refinement. Non-civil servant staff are more likely to be employed in areas such as Transport where earnings are higher than average.

Reserved public sector employment and paybill, 2019-20

Sector	Headcount	Cost per person	Total paybill (£ million)
Civil service	24,710	£35,334	£873
Other	10,155	£42,784	£434
Total	34,865	£37,504	£1,308

This gives a total paybill of £1.3 billion in 2019-20.

Building and associated costs

Information from the Cabinet Office State of the Estate report shows that the UK Government has around 450,000m² of estate in Scotland. Data from their benchmarking exercise shows that the running costs of the estate in Scotland are around £400 per m².³ This is approximately 30% lower than the UK average, reflecting higher property costs in London. This results in a cost of £178 million in 2019-20.

Government spending with households and businesses

Reserved government also makes payments directly to households and businesses in Scotland. The largest of these is social security payments such as the State Pension by the Department of Work and Pensions, but this also includes a wide range of other spend types. The spending considered is shown in the table below.

² [scottish-government-consolidated-accounts-year-ended-31-march-2021.pdf](https://www.gov.scot/publications/scottish-government-consolidated-accounts-year-ended-31-march-2021/pdf) (www.gov.scot)

See breakdown of staff costs set out on page 95

³ <https://www.gov.uk/government/publications/state-of-the-estate-in-2019-2020> See Figure 16

Non-staff and building expenditure by reserved government, 2019-20

	£ million	Notes
Social protection	17,293	Department for Work and Pensions social security spending and HMRC tax credits
Network Rail	767	Network Rail spending reported by HM Treasury is split between England & Wales, Scotland, and GB. Only Scottish spend on purchases and capital is included. Pay is captured separately.
Company tax credits	555	HMRC R&D tax credits and Creative tax credits
Public sector pension schemes	510	Covers various public pension schemes, including: Royal Mail, Armed Forces, Teachers from England and Wales, NHS staff from England and Wales. Payments to recipients with post codes in Scotland.
Research grants	325	Grants paid to institutions in Scotland by UK Research Councils
BBC	200	Spending on BBC staff, building, and contractors.
Renewable Heat Incentive	168	Grants to households in Scotland to install renewable heating
Nuclear decommissioning	167	Capital spending on nuclear decommissioning.
National Lottery	104	Grants paid to good causes in Scotland by the National Lottery
EEA medical payments	64	Payments to cover the medical cost of UK citizens abroad – estimated as a population share of UK total
Redundancy payments	37	Redundancy payments made when companies enter insolvency – estimated as a population share of UK total
Total	20,189	

These estimates are an areas for further refinement and possibly inclusion of other significant elements of reserved spending.

Overall reserved spending

The table below shows the breakdown of reserved spending into the different component categories.

Reserved spending in Scotland (2019-20)

	£ million
Staff costs	1,310
Building costs	178
Payments to households and businesses	20,189
Reserved spending in Scotland	21,667

Overall spending

The table below shows spending in Scotland by department, and how this compares to departmental spending for Scotland as published in GERS.

Comparison of bottom up spending and spending in GERS (£ million, 2019-20)

Department name	Bottom up	GERS	Difference
Business, Energy and Industrial Strategy	832	954	-121
Cabinet Office	2	121	-119
Competition and Markets Authority	4	9	-6
Digital, Culture, Media and Sport	382	498	-116
International Trade	0	41	-41
Education	81	22	59
Environment, Food and Rural Affairs	17	40	-23
Health and Social Care	67	64	3
HM Revenue and Customs	2,953	2,898	55
HM Treasury	7	64	-57
Home Office	42	118	-75
Justice	22	63	-41
National Crime Agency	2	42	-40
Office of Gas and Electricity Markets	18	5	12
Scottish Government and other Scottish bodies	42,003	41,903	100
Scotland Office	6	12	-6
Transport	948	975	-27
United Kingdom Statistics Authority	1	15	-14
Work and Pensions	15,549	16,046	-497
Public sector pension schemes	510	423	87
Other	474	801	-327
All	63,920	65,115	-1,195

As highlighted in the table above, estimated spending in Scotland is lower than the GERS spending for most departments. There are some departments where spending in Scotland is higher than spending for Scotland. These include the Department for Education, where spending is higher due to the location of the Student Loans Company in Scotland, and HM Revenue and Customs, where in GERS Scotland is allocated a population share of administration costs, whilst around 12% of their staff are based in Scotland.

The largest single element of difference in spend relates to the Department for Work and Pensions and overseas social security spending which is included in GERS.

Beyond this, there are a number of other notable areas where spending in Scotland is estimated to be lower than spending for Scotland recorded in GERS. Annex A provides a more detailed discussion of the departments with larger differences.

Next steps

These are the initial results from the analysis, and there are a number of proposed next steps in their development, including:

- Splitting results into current and capital spending, and then further into National Accounts measures, for example staff, intermediate consumption, transfers, and gross fixed capital formation.
- Improving estimates of procurement spending
- Developing estimates of defence spending and public sector debt interest.

We welcome feedback from users on how the work can be improved and suggested areas for future development. Feedback can be provided by emailing economicstatistics@gov.scot.

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ANNEX A

The table below provides a more detailed breakdown of the spending lines where spending in Scotland is estimated to be lower than spending for Scotland.

The table below shows some of the departments with larger differences, and compares with the GERS spending lines to identify what is likely to be driving them. These lines are areas where no spend is thought to occur in Scotland, but where Scotland is allocated spending in GERS.

Difference in spending between bottom-up and GERS estimates by line

Department	£ million
Work and Pensions	-£546
Outside UK spending in GERS	-£335
Business Energy & Industrial Strategy	-£137
International Climate Fund	23
UK Space Agency	21
British Energy	13
Deliver secure energy on the way to a low carbon energy future	12
Free and Fair Markets	9
Diamond Light Source	8
Science and society	8
Cabinet Office	-£113
Driving efficiencies and reforms that make Government work better	37
Support the Prime Minister and Cabinet to deliver the Government's Programme	27
Consolidated fund standing services General Election funding	21
Government Property Agency	14
Maintain the integrity of the Union, coordinate the security of the realm and ensure	9
Corporate Activities	7
Other departments	-£336
Security and Intelligence Agencies	£245
UK Parliament	£85
National Savings & Investments	£10
National Audit Office	£5

ANNEX B

Public Sector Debt Interest

One element of spending that is currently not identified as spending in Scotland relates to public sector debt interest expenditure. Although termed debt interest expenditure in the Classification of the Functions of Government (COFOG), this category includes all interest paid by the public sector, including, for example, interest paid by public sector pension funds. The table below shows the breakdown of public sector debt interest in 2019-20.

UK public sector interest payments, 2019-20

Sector	£ million	% of total
Central government	£48,107	91%
Local government	£651	1%
Public corporations	£198	0%
Public sector funded pension schemes	£14,946	28%
Bank of England	-£10,969	-21%
Total	£52,933	100%

Although conventional debt interest payments made to holders of central government bonds, or gilts, is the single largest element of expenditure, interest payments by public sector funded pension are also a significant part of overall interest spending. Since 2008-09, when the Bank of England began to purchase government bonds through the Bank of England Asset Purchase Facility, their holdings of UK government bonds offsets overall government

Debt interest payments are paid to the holders of the debt, some of whom are likely to be in Scotland, although there is no information on the geographical distribution of the holders of these bonds. There is, however, information on the sectoral distribution of holders of UK government debt. This is summarised in the table below.

Holdings of UK government gilts and treasuries (2020 Q1, £m market values)

Gilt holdings (£m, market values)	£ million	Share (%)
Insurance companies and pension funds	685,736	32%
Overseas	648,868	30%
Bank of England (Asset Purchase Facility)	513,738	24%
Other financial institutions and other	166,061	8%
Monetary financial institutions	134,928	6%
Households and non-profit institutions serving households	7,312	0%
Local authorities and public corporations	697	0%
TOTAL	2,157,340	100%

Around a third of UK government debt is held by overseas investors, and around a quarter are held by the Bank of England. Payments associated with this debt will not be made to Scottish residents.

Of the remainder, the majority are held by insurance companies and pension funds, and then other institutional investors. Very little debt is held directly by households. Given Scotland's strength in insurance and pensions, it is likely that some debt is

held by Scottish institutions, although it has not been possible to identify how much. This represents an area for future research.

Within GERS, around £3.1 billion of debt interest expenditure related to reserved functions in 2019-20. Based on the above, around a third of interest payments are made to overseas investors and will not occur in Scotland.

Defence

In line with the broad approach for reserved departmental spend, estimates defence spending have been produced which cover staff costs and purchases with industry. This broadly matches up with defence current expenditure. However, defence capital expenditure remains a gap in the analysis.

A small element of UK defence spending is identified as occurring overseas, so this will not directly occur in Scotland, although to the degree that it is used to pay wages and salaries of Scottish personnel based overseas, some of it may ultimately return to Scotland. The breakdown of UK defence spending into overseas, and capital and current spending, is shown in the table below.

	Current	Capital	Total
Outside UK	450	24	474
Within UK	28,531	10,123	38,654
Total	28,981	10,147	39,128

The standard Public Expenditure Statistical Analysis publications do not provide a more detailed breakdown of defence spending, but this can be compared to the breakdown of Ministry of Defence spending published as part of OSCAR data.

Ministry of Defence, economic spending (2019-20)

Expenditure type	£ billion
Staff	13.8
Rental costs	3.1
Purchases of goods and services	13.9
Other current net spend*	-0.8
Purchases of assets	9.6
Sales of assets and other capital spend	-0.3
Total	39.2

* Other current net spend includes income from sales of goods and services.

The main data source for non-staff spend is the publication Ministry of Defence Expenditure with UK Industry. This suggests that the Ministry of Defence spent £20.3 billion with industry in 2019-20. It is not particularly clear what this relates to. It presumably covers the £13.9 billion of purchases of goods and services, however, total spend on purchases of goods and services, rental costs, and purchases of assets is £26.6 billion, leaving around £6.3 billion of spend not captured.

A further complication of producing costs for bottom up estimate of staff costs relates to armed forces pension costs. Unlike other public sector pension schemes, the

Armed Forces Pension Scheme is entirely unfunded, with members paying a 0% contribution. The costs are met entirely by government. Looking at MoD accounts, this is reflected in the fact that social security and pension costs are 60% of wages and salaries, significantly higher than seen in other departments.

A bottom up estimate of staff costs, assuming a mean salary of £29,500, combined with an assumption that employer social security contributions are 60% of salaries, would give staff costs of around £0.6 billion, or around 4% of UK defence staff costs. This seems low, given that Scotland has around 7% of UK defence staff (civil service and armed forces), and that average pay for Ministry of Defence civil servants is only around 10% lower.

The table below summarises Scotland's bottom up estimate of defence expenditure. Scotland's low share of staff costs, and the gap relating to unidentified spend, remain areas for future work.

Scottish and UK defence spending (2019-20, £ billion)

	Scotland	UK	Scottish share (%)
Staff costs	0.6	13.8	4.0%
Transactions with industry	2.1	20.3	10.3%
Unidentified spend		5.1	-
Total	2.6	39.2	6.7%

International aid

Most international aid is by definition spent outside of the UK. However, estimates of spending in Scotland have been produced, covering staff and building costs. These are shown in the table below.

Staff and building costs associated with international aid (2019-20)

	£ million
Staff costs	£48
Building costs	£9
Total	£57